

Goodpasture Earns Degree At Tennessee

Plans Graduate Work For Fall Quarter

Another Y-12er took a coveted degree at the University of Tennessee's March 16 graduation exercises, as Russell T. Goodpasture was awarded his Bachelor's Degree in Chemistry.

Tom came to Y-12 March 1, 1954, after two years of undergraduate work at Tennessee Polytechnic Institute, Cookeville, Tennessee. He is a native of Akron, Ohio. The laboratory analyst is in Production Analysis, in the Plant Laboratory.

Goodpasture is married to the former Mildred Hayes, and they live at 709 West Outer Drive, Oak Ridge, with their three children, Steven, James and Jo Ann.

Taking full advantage of the Carbide Education Assistance Program, Goodpasture plans to take a hiatus for the summer . . . then back to graduate work in the Fall.

Friday Is Holiday As Christendom Mourns

Friday, April 12, is an official holiday for Y-12ers. No employee will be required to work, except those needed for the continuous operation and protection of the plant.

Good Friday, the darkest day in Christendom, begins a three-day mourning period climaxed by the celebration of Easter, when the Christian being gained victory over the grave.

The Midnight Bell Tolls For Thee, Good Citizen!

Next Monday, April 15, all Americans have a rendezvous, as the midnight bell gongs the deadline for filing income tax returns. Any person who earned \$600 or more in 1962 must file a return. See you at the Post Office Monday night sometime!



Russell T. Goodpasture

AIEE Meets Tomorrow In Recreation Hall

The Oak Ridge Section of the American Institute of Electrical Engineers will have a general meeting Thursday, April 11, at 7:30 p.m. in the Green Room of the Ridge Recreation Hall.

Speaker for the April program will be Paul M. Griffin, Optical Physics Group of the Physics Division of Oak Ridge National Laboratory. He will speak on the subject "Laser Fundamentals."

All IRE and AIEE members and guests are urged to attend. Refreshments will be served after the meeting. Details may be obtained from Bob George, extension 7454.

SAFETY SCOREBOARD

The Y-12 Plant Has Operated
32 Days Or
1,001,000 Man-Hours
(Unofficial Estimate)
Without A Disabling Injury
Through April 7
Phone 7755
For Daily Report
On Accident-Free Hours

Non-Destructive Testing Is A Vital Method In Determining Flawless Products In Y-12 Plant

"How are you doing?" is a question frequently asked when two friends meet. That same question is often applied in a more rigorous way to those engaged in production activities. In Y-12 it is absolutely essential that top quality products result from plant operations, and each group involved must be able to answer the question "how we are doing" and to make certain that only top quality products are shipped from the plant.

This is the second in a series of three articles on the product certification program in Y-12. Dimensional inspection was discussed in last week's Bulletin and physical testing is the subject of this article. A discussion of chemical and physical testing is the subject of this article. A discussion of chemical and isotopic analysis will follow.

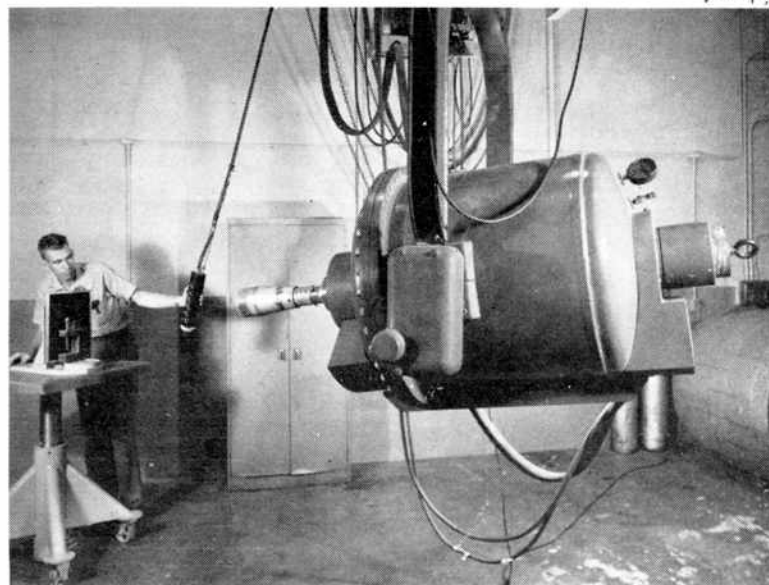
Personnel of the Physical Testing Department, Production Certification Division, are responsible for providing necessary non-destructive and metallurgical testing services in support of Y-12 production programs. Expressed another way, one could say it is their business to test the product "inside and out." It is imperative that the product delivered fulfill the traditional business practice of "satisfaction guaranteed," within requirements specified by the customer.

A variety of testing methods and types of equipment are utilized by the employees each day to accomplish the thorough evaluation given the product. Radiography is one of the common inspection methods used in the department's activities.

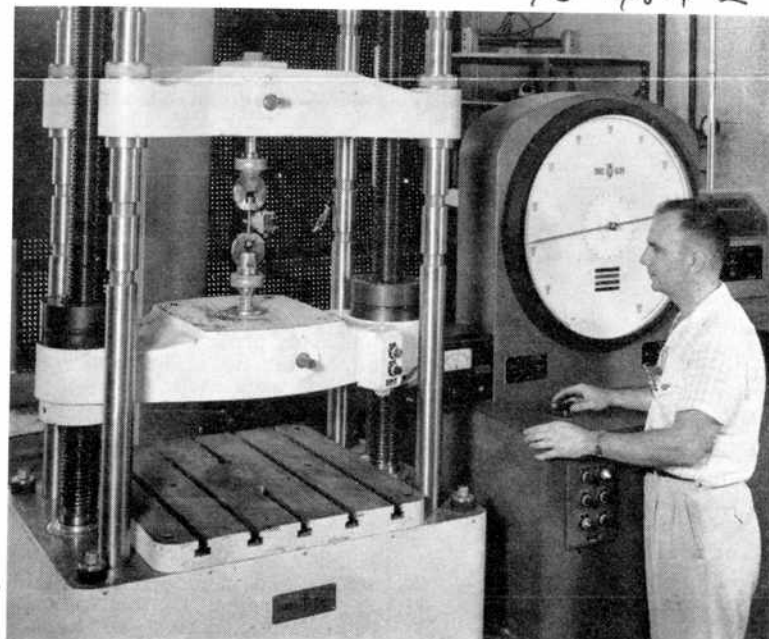
Radiography One Test

Radiography is a nondestructive method of internal examination in which objects are exposed to a beam of X-ray or gamma radiation. This examination is made with no damage in any way to the product, thus permitting it to be used for the original purpose for which it was made. Differences in thickness, density, or absorption, caused by

Continued on Page 4



POSITIONING ONE OF THE X-ray machines used to make radiographic tests is L. G. Losh. The item to be X-rayed is on the table by Losh and the film is behind the object. The controls in his left hand are used to raise, lower, rotate, and tilt the machine as desired. Radiography is one of the common inspection methods used to evaluate the properties of materials.



T. D. GOODMAN IS SHOWN operating a machine to determine the strength of a specimen of steel. The dial indicator and controls are shown on the right, while the mechanical gear holding the sample and applying the load force is to the left. Facilities are available for conducting tests at high or low temperatures, in addition to room temperature measurements. Goodman and co-workers used this type machine to determine yield strength, compressive strength, elongation, and joint failure strengths.

Dividend Checks To Be Mailed Tomorrow

Dividend checks are being mailed Y-12 employees tomorrow, Thursday, April 11. The amount paid to employees this year is

approximately 18 per cent of the amount each employee paid into the life insurance, sickness and accident Group Insurance plans.

Today Is Deadline For Swapping Badges

Today, Wednesday, April 10 is the deadline for picking up the new Spring yellow-bordered badges. The badges come down from the racks at the portals tonight at 11 p.m.

Employees who have not exchanged their badges by then will have to report to the Badge and Pass Office. Old solid blue badges will not be honored at the portals after tonight's 11 p.m. deadline.

The approximate 18 per cent is more than was refunded last year . . . as 15.04 per cent was refunded to Y-12ers in 1962.

In addition to the refunded benefits, Y-12ers received many benefits during 1962, payable for illness, accidents, and life insurances.

HAIR OF THE DOG

Workers in a St. Annes, England soda water factory recently extinguished a fire in the plant. The extinguisher they used? . . . soda water, of course.



THE LATEST RECIPIENT OF A \$1 award for a patent assignment is Arthur E. Sands, Chemical Department, at right. He receives the customary letter of commendation and one dollar from Y-12 Plant Superintendent Roger F. Hibbs. Sands' development, a "Method for Dissolving Ceramic Beryllia," earned the patent application.

The Bulletin

Published Weekly For The
Y-12 Employees Of
UNION CARBIDE
NUCLEAR COMPANY
Division of



UNION CARBIDE CORPORATION

JAMES A. YOUNG Editor

Member Appalachian
Industrial
Editors' Association

OFFICE

Post Office Box Y
Oak Ridge, Tenn.

Bldg. 9704-2 Room 149
Telephone 7109

Hays, Comolander And Peters Promoted

Additional Promotions
Effective April 1



H. M. Hayes Comolander

Three additional supervisory promotions are announced effective April 1... two in Mechanical Operations Division and one in Utilities.

Joseph B. Comolander is elevated from sheet metal worker to fabricating foreman in the General Metal Fabricating Shop. Comolander, who came to Y-12 November 1, 1960, is a native of Chapin, South Carolina. He served in the United States Army from 1944 until 1945.

The new foreman lives with his family at 114 Inca Circle, Oak Ridge. His wife is the former Betty Jane Mynatt.

Harry M. Hays is also upped to supervisory capacity in Mechanical Operations. Hays is a native of Detroit, Michigan, coming to Y-12 September 19, 1960. He served in the United States Army during 1952 through 1954. He lives at 73 West Norris Lane, Norris, and will be in the General Machine Shop.

The Utilities Division also announces the promotion of Johnathan B. Peters, process service operator to utilities foreman. Peters, a native of Altoona, Pennsylvania, came to Y-12 August 2, 1954. He lives at 110 Meadow Lane, Oak Ridge. His wife is the former Shirley L. Westley.

Kenneth O'Kelley, John F. Fernandez, John M. Nageotte, and William R. Burwell were also promoted to supervisory positions April 1.

We Have Heard It Said...

To keep a small boy out of the cookie jar, lock it, then hide the key under a bar of soap.

The safest way to double your money: Fold it over once, and put it in your pocket.

The definition of an intellectual: A person who can hear the "William Tell" Overture without hollering "Heigh Ho, Silver."

The definition of an antique: An object that wouldn't be wanted by anyone if there were more of it.



Wait until Rachel Carson hears about this! They're fertilizing snow these days, at least some ski resort operators are. Chemical companies say a sprinkling of ammonium nitrate or urea fertilizer forms an insulating crust over snow on warm days, delaying melting and giving a firmer surface. Guess Miss Carson will have to write another book called "The Silent Winter!"

There's no silence in Y-12 this week, plenty of news... first in

DEVELOPMENT

The Fred Pattersons, (he's in Metallurgical Development), are welcoming aboard little Mark Jeffrey Patterson, born March 30 in Oak Ridge Hospital. Mark didn't hit the scales too heavily... but is doing fine.

SHIFT SUPERINTENDENTS AND UTILITIES

Vacationing last week were E. M. Baird, J. B. Peters and E. E. Robertson, in parts and places unknown.

Vacationing this week is J. L. Finchum. Part of his time will be spent fishing and then he and the family will motor up to Ohio over the Easter holidays to visit relatives.

Taking off to West Virginia was H. B. Davis.

Deepest sympathy to the S. F. Creighs in the recent death of Mrs. Creigh's sister.

If anyone spots a car "flying by" don't be alarmed... it's just A. H. Norman in his new J-300!

An airlines reservation clerk was recently startled when asked by a telephone customer: "How long will my hangover in Dallas last?"

INDUSTRIAL RELATIONS

Fire and Guardsmen welcome the following back after a siege of illnesses: L. A. Litton, M. L. Cooper, G. H. McGrath, C. S. Davidson, and J. C. Hastings.

The department's deepest sympathy goes to L. O. Campbell and J. C. Booher; their fathers died recently.

C. C. "Jerry" Evans and spouse are off to Washington, D. C. to attend the Cherry Blossom Festival, compliments of the Lenoir City Band. Have fun, Jerry!

Wage Standards misses Campbell King around the grounds... hope that he is improving and will be back soon.

Signing checks isn't so bad... especially when you sign them on the back!

TECHNICAL

Statistical Services has Shirley Mackey and Tom vacationing last week down in Florida... hoping to see some Spring practice games down there.

The Department welcomes in John D. Spears and hopes he'll have off his coat and stay awhile!... Get well wishes to Bob Cullton, off ill.

You can't even promise a gal the moon anymore... she might take you up and demand a space suit!

ENGINEERING

Tool Engineering rolls out the rose-colored carpet for T. H. Finger, who hails from the All-American City of Knoxville.

Spending a week's vacation in Fort Lauderdale, Florida is Joe Howell... E. R. Watkins is vacationing also, but nobody seemed to know where.

We read a dentist advises eating dessert first to protect tooth enamel. Sounds to us like a case of putting the tart before the course!

MECHANICAL OPERATIONS

Down in Alpha One in General Shop Inspection, Charlie E. Harness is as proud as a peacock these days. His two daughters Ann and Suzie, together with a cousin Marjorie Bullock, won the first prizes in a talent contest in

Nashville at the National Beta Club convention. The trio, called "The Charmers," play drums, piano, electric guitar and saxophone. The reporter down in Alpha One says you'll be hearing more about these girls as time moves on.



Theresa Crawford

This winsome little miss is Theresa Crawford, four-year old daughter of M. L. Crawford, Machine Maintenance. The Crawfords live at 111 Wainwright Road, Oak Ridge, and have two other children, Lewis, 12, and Brenda, 14.



Sherri Elaine Williams

Here's another doll being shown around the division... little Sherri Elaine Williams. The photograph was made of Sherri when she was six months old... she is eight months old now. Her proud papa is Robert A. Williams, Production Machining in H-2.

There's no end to the population explosion. It might be said that the world has gone stork raving crazy!

FINANCE & MATERIALS

From the Mail Room, it's told that Orel Hartman vacationed this week in Greeneville, Tennessee... also planned to do some gardening at his home in Solway. Plant Records records that Evelyn Crouse is vacationing this week visiting her sister Mrs. E. P. Brown, in Raleigh, North Carolina.

E. W. Cook, Microreproduction and Engineering Services, vacationed last week at home in Crossville. Wayne Silver and family are vacationing in Miami, Florida this week... Get well



Mr. and Mrs. Jimmy Gregg



Congratulations to the following Y-12ers who will celebrate anniversaries within the next few days.

15 YEARS

Blanche H. Gibbs, Medical Department, April 12.

William H. Rodgers, General Machine Shop, April 12.

Martha B. Arp, Material Control, April 12.

Edgar Maeyens Sr., Production Control, April 13.

Jessie P. B. Arnold, Material Control, April 14.

10 YEARS

John C. Holt, Area Five Maintenance, April 10.

John W. Ellison Jr., Production Inspection, April 13.

Willard E. Hodge, Area Five Maintenance, April 13.

Earl C. Farris, Assembly Operations, April 13.

Harry B. Pruden Jr., Process Maintenance, April 13.

Tom A. McFarland, Area Five Maintenance, April 14.

Howard G. Watkins, Research Services, April 15.



GREGG-PARK

Miss Gayle Park and Mr. Jimmy Gregg were married Saturday, March 23, at 7:30 p.m. in the Wallace Memorial Baptist Church, Knoxville. The Reverend J. G. McCluskey officiated.

The bride is the daughter of Mr. and Mrs. William Homer Park, 5628 Davida Drive, Knoxville. Her father is in Y-12's Special Mechanical Production and her mother Mrs. William Park is in Plant Records. Mr. and Mrs. James T. Gregg, Blueberry Drive, Powell, are parents of the groom.

Given in marriage by her father, the bride wore a full length gown of silk organza over taffeta fashioned with a bodice of chantilly lace with a scalloped neckline and long tapered sleeves. The tiers of chantilly lace forming the sheath front skirt had a full back ending in a chapel train. A pill box of chantilly lace and pearls held the bouffant veil of English illusion. Her bouquet consisted of snow white roses centered with an orchid.

Mrs. Martha Wardly, Memphis, sister of the bride, was matron of honor. Other attendants were Miss Barbara Jean Tally, Nashville; Miss Audrey Martin, Miss Carolyn Bledsoe, and Miss Carolyn Hamrick, Linda Gayle Wardly, flower girl, is a niece of the bride. The attendants wore pink organza, and the flower girl wore white organza.

Mr. Jack Lee acted as the groom's best man. His other attendants were Kenneth Gregg, Ronnie Milligan, Jimmy Waddell, and Richard Hatchet, all of Knoxville.

The couple was honored by a reception in Fellowship Hall at the church immediately following the ceremony.

The couple is at home at Chilhowee Apartments, 5100 Asheville Highway, Knoxville.

Louis M. Doney, Development, Is Chosen For Illinois' Ceramic Advisory Board

Louis M. Doney, development engineer in Y-12's Ceramics and Plastics Development Department, has been named a member of the Advisory Board to the Ceramic Engineering Department at the University of Illinois, Urbana, Illinois.

The advisory board meets once each year at the first semester of each academic year, and represents industry and alumni in presenting problems before the school. Himself an alumnus of Illinois, Doney came to Y-12 September 6, 1960, after almost 10 years of material research at Oak Ridge National Laboratory.

Doney lives at Route 20, Macklin Lane, Knoxville, and only last year received the Hewitt Wilson award from the American Ceramic Society for outstanding contributions to the field of ceramics for 1962.



Louis M. Doney

wishes are sent to J. L. Markland, ill in Oak Ridge Hospital. Timekeeping has J. A. Shell and family vacationing this week in Clearwater, Florida.

ACCOUNTING & BUDGET

Best wishes are sent to Kenneth Denton's wife who is in the University of Tennessee Hospital for tests.

Ellen Hughes is taking a long week-end to journey to Auburn University to attend a Phi Delta Chi fraternity banquet with her pharmacy student husband.

Also taking off for the long week-end is Ralph Vaughan, visiting relatives in Freis (that's pronounced Freeze, if you'll pardon the ugly word!), Virginia.

Industrially, the ceramics field covers the cement, porcelain, glass and brick installations as well as others. Research and development in this field in Y-12 is highly important.

Loose talk is dangerous.

Five Big Golf Tournaments Set For '63



"Hey, Arnie, Wait for me!"

Five big Golf Tournaments are announced by the Recreation Department for Y-12 tee-men for the summer months.

The first big contest is scheduled for the Green Meadow Country Club, Maryville, for Saturday, April 27. Tee-off times will be assigned in Room 149, Building 9704-2, at 7:30 a.m. Tuesday, April 23. Be there on time if you want a preferred time... as the schedule will go on a first-come, first-served basis.

Other tournaments are set at the following East Tennessee greens:

May 25—Wallace Hills Golf Course, Maryville
June 29—Beaver Brook Country Club, Powell
July 20—Springbrook Country Club, Niota
Aug. 24—Gatlinburg Country Club, Gatlinburg

So, get those old irons polished up... and plan now to take on the Players, Palmers, and punk golfers from these parts!

Rippers Will Roll Classic Swingsters

Roll-Offs Decide Champs Tomorrow

The big Rippers took the last leg of the Classic League for Y-12 bowlers last week, despite their three point loss to the Wolves. They will roll off this week with the Swingsters who took the first half of league play.

The All Stars last week took the Smelters for three, as did the Wasps over the Has Beens, the Playboys over the Tigers, and the Cubs over the Swingsters. The only four-point win of the season's final night saw the Sportsmen clobber the Bumpers. Splitting two were the Eightballs and Markers, as well as the Rebels and Screwballs.

Ed Sise and J. E. Morgan, both on the Sportsmen, took high single scratch games of 226 each. Sise came back to sweep the board with a 247 single handicap; series games of 633 scratch and 696 handicap.

The Sportsmen also swept team highs rolling 1025 scratch and 1125 handicap singles; 2916 scratch and 3213 handicap series games.

Final league standings:

Team	W	L
Rippers	43½	16½
All Stars	42	18
Has Beens	36	24
Wasps	36	24
Swingsters	35	25
Rebels	35	25
Bumpers	31½	28½
Sportsmen	30	30
Markers	29	31
Playboys	29	31
Wolves	26½	33½
Smelters	25½	34½
Screwballs	24½	35½
Tigers	21½	38½
Eightballs	19	41
Cubs	16	44

Until a vaccine is invented to counteract Spring Fever, we'll just have to grin and bear it... that is, if we can stay awake long enough.

All Stars Capture Basketball Tourney

Y-12 Flyers Fall In Final Overtime

The Carbide Basketball Tournament was a thriller from the opening gun... as the All Stars, from Oak Ridge Gaseous Diffusion Plant, capped the crown in overtime Thursday night with Y-12's Flyers. The All Stars led throughout the game in the finals, but the Flyers pulled up in the last seconds to tie the score. They folded, however, in overtime, giving the game to the Stars, 43 to 50.

In the overtime period the Flyers chose to hold the ball, but lost it early on an infraction. The Stars got a quick field goal... then earned five more points via the foul line.

Carlos Brooks led the losers with 14 points... Jim Pugh had 13. As usual, the All Stars' Clark led the pack with 17.

Stars Beat Misfits

In the semi-finals, the All Stars downed Y-12's Misfits 40 to 33 in a very rough and tumble game. C. A. Peters, Misfits, put on a great shooting performance, gaining 23 points... but it wasn't enough to overcome the Stars' Mothershed, Henderson and Cox.

The Flyers upset the Atoms also in the semis... 47 to 44, in one of the best games of the year. The Atoms led through the first three quarters. The Flyers kept control of the backboards in the fourth period... as Forrester scored 14 and Brooks tallied 13. Chitwood led the Atoms with 16... Jim George had 12.

Demons Fall Early

Opening night in the tournament saw the Flyers beat the Lab Demons, from ORGDP, 49 to 42. The Flyers used a hot first half to subdue the Demons. As it turned out the Lab Demons cut nine points from the Flyers' lead in the final period. If they had played that kind of game throughout it might have been a different story. Lou Fitzgerald led the Flyers, firing 22 big points.

Y-12's Misfits put the Eagles out early 48 to 22. The Eagles folded after a fast zone defense put up by the Misfits. The Misfits' star center, Peters, made the difference both in offense and defense... gaining a total of 21 points. The 'Fits held the usual high scoring Ralph Vaughan to nine points.

Thus ORGDP's All Stars are tournament champions, as well as second placed team in the Basketball League.

Y-12's Atoms took both halves of the league play, becoming undisputed league champions. Last year they took both league and tournament trophies. This year is a different story, as they share the spotlight with another fine team from ORGDP.

Y-12 22-Men Net 3 Points In Rifle Play

The ORNL team gained again in the 22 Calibre Rifle League last week by taking both scratch and handicap highs in firing. Scratch firing read thusly: ORNL: 1410, Independents: 1319; Y-12: 1387. Handicap scores were: ORNL: 1443.739; Y-12: 1442.210; and Independents 1440.604.

On Y-12's team high scratch firer was Will Davis with 286. Dave DeWalt followed with 283. Next in line was Bert Searles with a 277 scratch total. Handicap highs were W. J. Brown firing 289.482; Davis with 289.254 and G. W. Holcombe with 289.168.

League standings follow:

Team	Points
ORNL	48
Y-12	36
Independents	24

Reagents Win Bush Pennant In Roll-Off

The nine-team Bush League, comprised of Y-12 bowlers, rolled off last week for team championship. The Reagents who took the league's first half downed the Dry Hides for two games, and took total pins in the three-game match. Total pin difference was a span of 71 as the Reagents capped 2920 pins to the Dry Hides' 2849.

There was only a two-point split difference in handicaps between the evenly matched teams. For all practical purposes, scratch scores determined the league champs.

The Reagents team consists of Jim Franklin, Bill Garland, Doyle Martin, Captain Roy Scates and Shorty Heatherly. Scates' 495 scratch series was high of the night.

Congratulations, Bush champs... see you next year!

Day Grows Late For C League Men

Big Five Maintain One Point's Edge

It's right down to the wire for the C League bowlers. The Big Five stand in a one-point lead with their three-point victory over the SP's. The Sunflowers moved into second place with a four-point win over the Hi Lifers. Other four-point wins saw the Lucky Strikes over the Screwballs, the Strikers over the Rounders and the Rodders over C Shift. The Par Busters and Hookers split two points each.

Wayne Groppe, Lucky Strikes, took high singles in scratch play with 233. Roy Scates, Lucky Strikes, had a high handicap single game with 250. The Rodders' Bates took scratch series high, rolling 602. L. C. Hodgson, Ramblers, took high handicap series with 699. The Sunflowers took high singles with 921 scratch scores. The Rodders took handicap highs with 1045 in singles and 3095 in series. The Lucky Strikes were scratch series leaders with 2657.

League standings follow:

Team	W	L
Big Five	35	17
Sunflowers	34	18
Hi Lifers	31	21
Lucky Strikes	31	21
Strikers	31	21
Par Busters	30	22
Rounders	27	25
Rodders	23	29
Hookers	20	32
Screwballs	18	34
SP's	17	35
C Shift	15	37

Half the world spends most of its time telling the other half how to live.

Ruby Lucas, Bobbie Hill Also Won In All Carbide

In reporting the All Carbide Bowling Tournament winners, the names of two star players from Y-12 were omitted from the winning circle. Taking doubles in handicap scoring were Bobbie Hill and Ruby Lucas with scores of 1229. In addition to the high scores, Ruby picked up a four, seven, ten split... something you don't see everyday on the alleys! In regular league play last week Ruby also picked up a six, ten, seven split in some fancy pin action.



THE BIG FISHING RODEO held March 30 by the E, F, G, H, and J Shifts drew a throng of early Spring anglers out to try their luck. At the top is seen several of the winning entries. In the center, J. C. Cooter and B. E. Jolly are seen with their catches. An unidentified angler comes in for a landing in the lower photo. Ideal weather brought Y-12ers out like termites, and the successful tournament was enjoyed by all participants.

Cool Cats Are Mixed League Bowling Leads

The Cool Cats hung onto their four-point lead in the Mixed League for Y-12 bowlers as they downed the Goofers by three points. The Ghosts followed close by with their three-point win over the Phantoms. The Scrappers capped a four-point win over the Ghosts, while the Pin Plasters took three from the Alley Cats.

Eleanor Rekemeyer, Scrappers, took all female honors, rolling singles in order of 176 scratch and 229 handicap totals. In series she had 480 scratch and 639 handicap tallies. Charlie Gillihan, Ghosts, and W. B. Stephens, Goofers, tied for a single scratch game high of 206. Howard Gibbs, Toppers, took handicap highs with 243 singles and 656 series games. Gillihan took scratch highs in series with 543.

The Scrappers took team honors, rolling 703 scratch, 880 handicap in singles; 1927 scratch and 2458 handicap in series.

League standings follow:

Team	W	L
Cool Cats	36	16
Ghosts	32	20
Alley Cats	28½	23½
Goofers	27	25
Pin Plasters	25½	26½
Scrappers	25	27
Phantoms	21	31
Toppers	13	39

4-Squares Keep Slim E Advantage

Final Night Will Decide Alley Champs

Another Y-12 bowling league is going right down to the wire as the E Bowlers square off for one more try on the alleys. The Four-squares stand two meager points in the lead, by their defeat last week to the Cannonballs by three points. Pinquins moved up on a four point win over the Ten Pins. The Alleybees took the Pin-twisters by three points.

John Fernandez, Foursquares, took singles with a 198 scratch, 234 game. Frederick Rosko, Foursquares, had high series with games of 544 scratch and 643 handicap.

The Pinquins swept the team honors with 675 scratch, 832 handicap singles. In series play they racked 1982 in scratch and 2453 in handicap.

League standings follow:

Team	W	L
Foursquares	34	22
Pinquins	32	24
Alleybees	29	27
Ten Pins	26	30
Cannonballs	25	31
Pin-twisters	22	34

The best way to get a doctor in the house these days is just turn the television set on!

Go-go-go for security.

BULK RATE
U. S. Postage
PAID

Oak Ridge, Tenn.
Permit No. 71

UNION CARBIDE NUCLEAR COMPANY

Division of

Union Carbide Corporation

Post Office Box Y
Oak Ridge, Tennessee

RETURN POSTAGE GUARANTEED

POSTMASTER: DO NOT FORWARD. IF ADDRESSEE HAS MOVED,
RETURN TO SENDER IMMEDIATELY.

Health Physics Society Series Of Shielding Lectures For April

The East Tennessee Chapter of the Health Physics Society announces a series of shielding lectures to be given by D. K. Trubey during the month of April. There will be three sessions at the Oak Ridge Institute of Nuclear Studies Training Building, Room 218, beginning at 7:30 p.m. on Tuesday, April 16 . . . the other sessions will be held April 23 and 30. The sessions are free.



D. K. Trubey



Car pool member wanted from West Hills, Knoxville, to East Portal, straight day. J. F. Witt, plant phone 7-8285, home phone 588-2015.

Ride wanted from Placer Lane, Oak Ridge, to North Portal, straight day. Janice Trent, plant phone 7-8048, home phone Oak Ridge 483-0923.

Ride wanted from Lenoir City to Central Portal, straight day. Joyce Williamson, plant phone 7-8394, home phone, Lenoir City 986-2806.

Ride wanted from Clinton to North Portal, straight day. J. C. Queener, home phone, Clinton 457-2935.

Car pool members wanted from Cumberland Estates, or West Haven vicinity, Knoxville, to Central Portal, straight day. Call Clark or Norris, plant phone 7009.

1962 Payroll At Paducah In Excess Of \$10 Million

The payroll at the Atomic Energy Commission's Paducah Gaseous Diffusion Plant totaled \$10,118,992 during 1962. The huge plant, which produces enriched uranium 235, is operated by Union Carbide Nuclear Company for the AEC.

B. N. Stiller, Paducah Area Manager for the Commission, said the total included \$93,992 paid to AEC employees, and \$10,025,000 paid to UCNC employees.

Keeping up with all the questions of the day leaves absolute no time for the answers.

Trubey received his BS in Physics from Michigan State University and joined the staff of Oak Ridge National Laboratory in 1953 for experimental shielding work. Graduating from the Oak Ridge School of Reactor Technology in 1955, he continued shielding design and shielding research calculation with the Neutron Physics Division. He has taught radiation shielding at ORSORT since 1960 and recently has been appointed a member of the staff of the Radiation Shielding Information Center.

The lectures will include the basics and also more difficult problems. This is one of a number of scheduled programs planned for technical advancement of chapter members during the coming year. The lectures will also be excellent reviews for those applying for Health Physics Certification.

To be covered in the series will be gamma-ray and neutron shielding calculational methods, interaction of radiation with matter, scattering, typical results of computing-machine programs and a description of the Radiation Shielding Information Center.

Employees interested in radiation shielding, Health Physics, or related fields are invited to attend the lectures. Further information on the series or regarding membership in the HPS can be obtained by contacting the president, H. V. Heacker, 511 Roberts-ville Road, Oak Ridge.

Let Us Be The First To Wish You Greetings

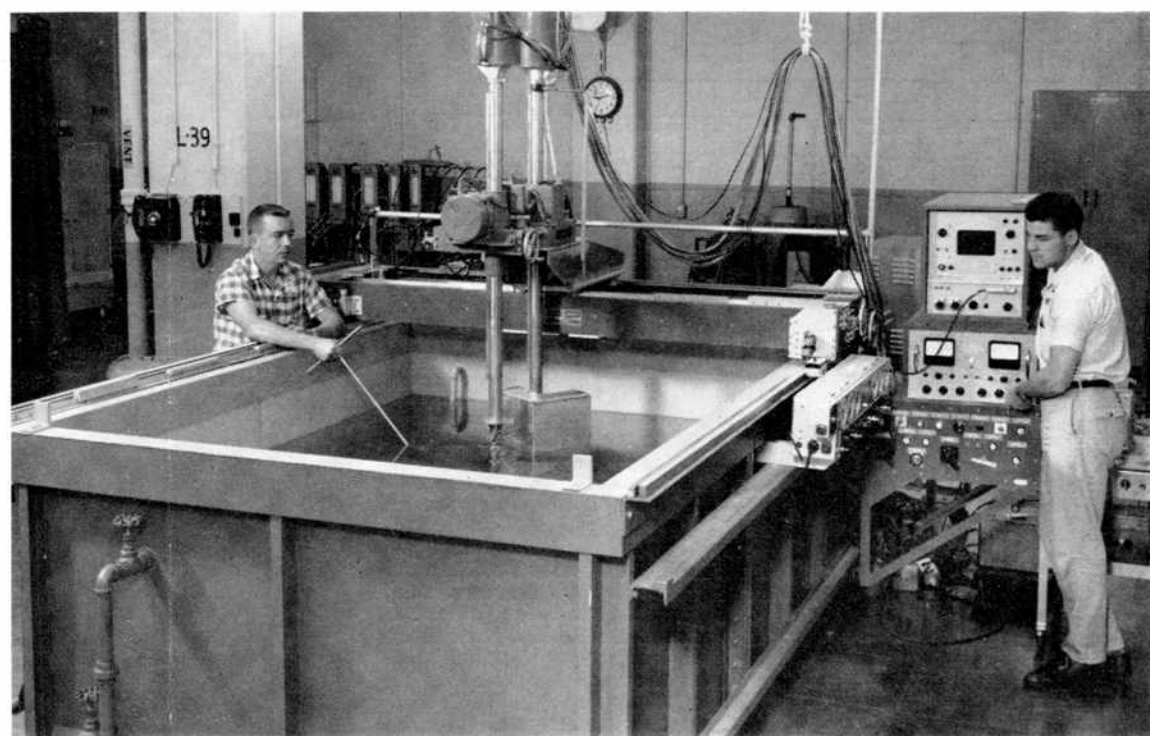
There's no chance that anybody else is going to get there first . . . with a Christmas greeting. The man isn't lazy . . . he just believes in the Boy Scout motto "Be Prepared." William K. Forrester, Tool Engineering, still has his Christmas tree and lights up on his house.

The Forrester residence at 5627 Divida Drive, Knoxville, is tastefully decorated for the holiday season. "No, I'm not late taking the tree down," he explains, "I'm just early with this year's decorations!"

Kroft Appointed V.P. At Haynes Stellite

Fred C. Kroft Jr. has been appointed a vice president of Haynes Stellite Company, a division of Union Carbide Corporation. It has been announced by Robert M. Briney, division president.

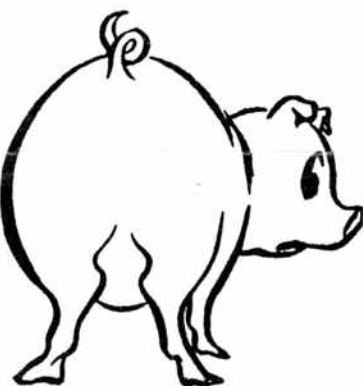
Kroft joined Union Carbide in 1942 as a research engineer in the technology department of Haynes Stellite Company in Kokomo, Indiana. He is a graduate of Purdue University.



ULTRASONIC TESTING IS A method utilizing high frequency sound waves for detecting flaws in materials. Clayton R. Olmstead, right, and D. L. Van Dusen are seen in the process of preparing for an ultrasonic test. Clayton is positioning the item to be tested and Van Dusen is operating the control which moves parts of the test equipment into place. The object to be tested will be immersed in water and sound waves passed through the material. Sound signals reflecting from any defects within the objects can be measured and interpreted. Internal laminations or cracks less than 0.001 inch wide can be detected.

Big Ham Shoot Set Friday, April 13

Shotgun Experts
To Visit In Ridge



Ham Shoot? . . . Who Me?

There's a big holiday Ham Shoot planned for Friday, which is, incidentally, a day off for Y-12ers. The shift combinations of E, F, G, H and J are all set for the big event beginning at 10 a.m. Friday, April 12, at the Oak Ridge Sportsman's Association range. (That's down near the Oak Ridge Country Club in the west end of town.)

Shooting will be in the 12, 16 and 20 gauge shotgun class, and any Y-12 employee, his wife, son or daughter are eligible to fire in the competition. There are three big door prizes . . . a Coleman stove, a .22 calibre rifle and a sleeping bag.

If Friday is rainy, the same 10 a.m. time on Saturday, April 13, will be the shooting time . . . at the same place.

There is no entry fee . . . and ammo is available at the range. This ammunition must be used in the shoot.

With plenty of hams, and the Easter season right upon us . . . it's a good chance to take home some bacon . . . that is, if you can hit the side of a barn.

Cheap Eggs Are Just As Good As Expensive

Shell color does not affect the food value you get from eggs. So buy the less expensive ones. Choose lower-grade eggs (B or C) for scrambling, omelets, cooking or baking.

For eggs to be cooked in the shell, for frying or poaching, obtain the Grade A large eggs. They look better!

Non-Destructive Testing

Continued from Page 1

Internal defects or inclusions, are apparent in the shadow image on a photographic film placed behind the object. The resultant exposed and processed film is called a radiograph. Each radiograph produced is given a careful interpretation by trained personnel in the Nondestructive Testing Laboratory and is judged in accordance with the specifications of the material. Internal defects as small as the head of a common pin can be detected by careful work. The machine is shielded with thick concrete barriers to provide complete personnel protection when it is being operated.

Nondestructive testing is conducted not only as one of the final steps in product certification but also as an intermediate step during the production process. In this way, if material is found to be defective at some point in the process, it can be eliminated at that point. This system results in savings of both time and money, since additional fabrication efforts expended on defective material would be wasted.

Numerous Tests Used

"You can't always believe what you see," they say in Physical Testing. Some material may have such finite cracks that the human eye cannot detect them. To determine if cracks exist, a product is soaked in a penetrating solution which is fluorescent. When the product is removed and the solution washed away, small cracks can be seen if they are present since they will retain some of the fluorescent penetrating material. Numerous other nondestructive tests are practiced including eddy current techniques, magnetic particle inspection, physical density measurements, and strain gage analyses.

It is not enough to know that materials used in the manufacture of Y-12 products contain no unacceptable defects. Specifications normally call for materials of certain metallurgical properties. It is the job of the people in the Metallurgical Services Laboratory to measure these properties.

Ingenuity Plus Care

Typical examples of Physical Testing's work presented in this article give some idea of the importance attached to top quality products at Y-12. The ingenuity and careful work of personnel in the department have helped in building a reputation of which we can all be proud. As was said

Glenda Smith Takes Coalfield Pageant

Beauty And Brains
DO Mix, Thank You!



Glenda Smith

A Y-12er's daughter has disproved the old belief that beauty and brains don't mix. Glenda Smith, daughter of Mr. and Mrs. Leon Smith, Coalfield, was recently selected the most beautiful girl at the annual beauty pageant at Coalfield High School. Her father is in Production Machining, in 9212's E Wing.

In her junior year at Coalfield Glenda was picked as one of the top five of the fairest in school.

To go with her classic looks, Glenda has an outstanding academic standing to match. She is a member of the Beta Club, Glee Club and president of the Future Homemakers Association. She is also a member of the school's basketball team and takes part in many literary activities. In the past year Glenda won first place in the dramatic reading event.

The beauty contest in which Glenda took first honors featured competition among 42 of the school's fairest contestants.

at the beginning of this article, it is their business to test materials "inside and out." They do a very thorough job in this business.

Definition of nerve: A man seated on a bus, flirting with a woman who is standing!